

**ABSTRACT**

Polymorphic A-kinase anchor proteins (AKAPs) and nucleic acids encoding the proteins are provided herein. Methods of detecting polymorphic AKAPs and nucleic acids encoding the AKAPs, and kits for use in the detection methods are also provided. Further provided herein are methods of identifying subjects having or at risk of developing disorders of signal transduction. Methods of determining susceptibility to morbidity and/or increased or early mortality are also provided.